

Appl. No. 10/673,306
Amdt. Dated May 24, 2006
Reply to Office action of February 08, 2006
Attorney Docket K-2026

REMARKS/ARGUMENTS

This amendment is submitted in response to the Official Letter dated February 24, 2006. Claims 1-20 remain in this application for examination. Favorable consideration of the application is respectfully requested.

1. **Rejection of Claims 1-20 under 35 U.S.C. 103**

The Examiner rejected Claims 1-20 under 35 U.S.C. 103(a) as being unpatentable over Satran et al. in view of Lillie. The Examiner stated:

Satran et al. discloses a rotary cutting tool comprising flutes (5a,5c), inserts (6) and receiving pockets for said inserts and most of the claimed invention except for different angular pocket spacing and different axial/radial spacing. Lillie teaches at column 5, lines 13-34 that it is well known in the art to space the insert pockets at various angles and spacings. It would have been obvious to one having ordinary skill in the art at the time the invention was made to locate and space the components of Satran et al. in the claimed manner taught by Lillie in order to increase the versatility of the tool such that many types of operations can be performed.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant respectfully submits that the combined references do not teach all of the limitations of claims 1 or 11. Specifically, neither Satran et al. nor Lillie teaches or suggests the limitation that appears in claim 1, that "the angular spacing of the cutting inserts within at least one of the rows varies within the row" or the limitation that appears in claim 11, that "the angular spacing of the cutting inserts within the rows varies within the first row, and the angular spacing of the cutting inserts within the second row varies within the second row and varies from the angular spacing of the cutting inserts within the first row."

To support the Examiner's apparent recognition that the references do not teach or suggest the claimed invention, the Examiner made the following statement:

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"The examiner submits that applicant acknowledges that Lillie discloses that the physical relationships may be varied as deemed necessary (see column 5, lines 13-34 of Lillie) and that it would have been obvious to one having ordinary skill in the time the invention was made to locate the cutting inserts in the claimed array of rows and columns..."

The undersigned has reviewed the record and respectfully disagrees that Applicant has made any admission that the "angular spacing of the cutting inserts within at least one of the rows varies within the row" is taught by Lillie, and requests that the record clearly reflect this fact. Furthermore, it is unclear what "physical relationships" the Examiner is referring to in the above quoted passage. In a response to an Office action filed by Applicant on December 16, 2004, Applicant made the following statement. "In regard to the relationships, it appears that Lillie is merely referencing the radial spacing of the inserts and axial and radial rake of the inserts. Lillie provides no teaching or suggestion to vary the angular spacing of the cutting inserts within at least one row as claimed."

It appears that the Examiner is asserting that it would be obvious to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where neither Satran et al. nor Lillie provides any indication of which parameters are critical or what direction as to which of many possible choices is likely to be successful. Obvious to try is not the standard under Section 103.

Applicant has varied the angular spacing of the inserts within a row to eliminate vibrational harmonics. Varying angular spacing of the inserts within a row is not an obvious relationship to achieving the elimination of vibrational harmonics. This is particularly relevant when neither Satran et al. nor Lillie makes any mention of vibrational harmonics.

For at least the foregoing reasons, the references cited do not teach all the limitations present in either claims 1 or 11. Applicant respectfully requests allowance of Claims 1 and 11 and claims 2-10 and claims 12-20 that depend therefrom, respectively.

Should the Examiner believe anything further would be desirable to put the application in better condition for allowance, the Examiner is invited to contact the undersigned agent at the telephone number listed below.

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2. **Conclusion**

In view of the above remarks, it is believed that the application is in condition for allowance. Accordingly, an early Notice of Allowance is respectfully requested.

Respectfully submitted,



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